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10/788,838

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Raja Neogi

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EXAMINER

SHEPARD, JUSTIN E

ART UNIT

PAPER NUMBER

2424

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/788,838	<b>Applicant(s)</b> NEOGI, RAJA	
	<b>Examiner</b> Justin E. Shepard	<b>Art Unit</b> 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri in view of Dorai in view of Schrempp in view of Kiewit.

Referring to claim 1, Agnihotri discloses a method, comprising:

determining, at a hardware server node, terminal node characteristics of a terminal node coupled to said server (column 18, lines 38-67; figure 1, parts 2 and 4; column 4, lines 22-23 and 35-40);

selecting in a server an algorithm and one or more control parameters for processing a fingerprint (column 8, line 67 to column 9, line 4; column 18, lines 38-67);

downloading, from the server, the selected algorithm and one or more control parameters to a fingerprint control protocol (column 18, lines 38-67).

Agnihotri does not disclose a method wherein the selecting an algorithm based on the determined terminal node characteristics;

transferring the fingerprint control protocol from said central office infrastructure to a terminal node; and

the server uses a snooping method.

In an analogous art, Dorai teaches a method wherein the selecting an algorithm based on the determined terminal node characteristics (column 7, lines 1-26);

and the connection between the server and the terminal node is a central office infrastructure (figure 2, part 270).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth analysis taught by Dorai to the method disclosed by Agnihotri. The motivation would have been to enable a less accurate fingerprint to be created when bandwidth doesn't allow for a more accurate fingerprint to be created.

Agnihotri and Dorai do not disclose a method for transferring the fingerprint control protocol to a terminal node; and

the server uses a snooping method.

In an analogous art, Schrempp teaches a method for transferring the fingerprint control protocol to a terminal node (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Agnihotri, Dorai, and Schrempp do not disclose a method wherein the server uses a snooping method.

In an analogous art, Kiewit teaches a method wherein the server uses a snooping method (column 5, lines 37-45).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the server snooping taught by Kiewit to the method disclosed by Agnihotri, Dorai, and Schrempp. The motivation would have been to enable the server to keep track of possible commercials to check the algorithm against.

Referring to claim 2, Agnihotri discloses a method of claim 1, further comprising: utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 3, Agnihotri discloses a method of claim 2, wherein utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint, comprises: generating the fingerprint (column 8, line 67 to column 9, line 4).

Agnihotri and Dorai do not disclose a method for forwarding the fingerprint to the headend node for verification.

In an analogous art, Schrempp teaches a method for forwarding the fingerprint to the headend node for verification (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Referring to claim 6, Agnihotri discloses a method of claim 1, wherein the fingerprint is a video fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 8, Agnihotri discloses a method of claim 1, wherein the fingerprint control protocol is an application level control protocol (column 18, lines 38-67).

Claims 9, 10, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri in view of Dorai.

Referring to claim 9, Agnihotri discloses a system, comprising:

a headend node, wherein the headend node determines terminal node characteristics, wherein the headend node selects an algorithm and one or more control parameters to process a fingerprint, and wherein the headend node downloads the selected algorithm and control parameters to a fingerprint control protocol (column 8, line 67 to column 9, line 4; column 18, lines 38-67).

Agnihotri does not disclose a method wherein the terminal node characteristics include characteristics of a media network;

selects an algorithm and one or more control parameters to process a fingerprint based on the determined terminal node characteristics.

In an analogous art, Dorai teaches a method wherein the terminal node characteristics include characteristics of a media network;

selects an algorithm and one or more control parameters to process a fingerprint based on the determined terminal node characteristics (column 7, lines 1-26).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth analysis taught by Dorai to the method disclosed by Agnihotri. The motivation would have been to enable a less accurate fingerprint to be created when bandwidth doesn't allow for a more accurate fingerprint to be created.

Referring to claim 10, Agnihotri discloses a system of claim 9, further comprising: a terminal node, wherein the terminal node receives the fingerprint control protocol from the headend node and uses the fingerprint control protocol to process the fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 14, Agnihotri discloses a system of claim 9, wherein the fingerprint is a video fingerprint (column 8, line 67 to column 9, line 4).

Referring to claim 16, Agnihotri discloses a system of claim 9, wherein the fingerprint control protocol is an application level control protocol (column 18, lines 38-67).

Claims 17, 18, 19, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri in view of Dorai in view of Schrempp.

Referring to claim 17, Agnihotri discloses a machine-readable medium containing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:

determining, at a headend node, terminal node characteristics (column 18, lines 38-67);

based on the determined terminal node characteristics, selecting an algorithm and one or more control parameters for processing a fingerprint (column 8, line 67 to column 9, line 4; column 18, lines 38-67);

downloading the selected algorithm and one or more control parameters to a fingerprint control protocol (column 18, lines 38-67).

Agnihotri does not disclose a method wherein the terminal node characteristics include characteristics of a media network; and

transferring the fingerprint control protocol to a terminal node.

In an analogous art, Dorai teaches a method wherein the terminal node characteristics include characteristics of a media network (column 7, lines 1-26).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth analysis taught by Dorai to the method disclosed by Agnihotri. The motivation would have been to enable a less accurate fingerprint to be created when bandwidth doesn't allow for a more accurate fingerprint to be created.

Agnihotri and Dorai do not disclose a method for transferring the fingerprint control protocol to a terminal node.



In an analogous art, Schrempp teaches a method for transferring the fingerprint control protocol to a terminal node (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Claim 18 is rejected on the same grounds as claim 2.

Claim 19 is rejected on the same grounds as claim 3.

Claim 22 is rejected on the same grounds as claim 6.

Claim 24 is rejected on the same grounds as claim 8.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri and Dorai as applied to claim 9 above, and further in view of Schrempp.

Referring to claim 11, Agnihotri and Dorai do not disclose a system of claim 10, wherein the terminal node generates the fingerprint and forwards the fingerprint to the headend node for verification.

In an analogous art, Schrempp teaches a system of claim 10, wherein the terminal node generates the fingerprint and forwards the fingerprint to the headend node for verification (figure 6; paragraph 49).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the fingerprint transmitting taught by Schrempp to the method disclosed

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by Agnihotri and Dorai. The motivation would have been to enable the system to identify work that does not contain any identifying information.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp and Kiewit as applied to claim 1 above, and further in view of Matsunaga.

Referring to claim 4, Agnihotri, Dorai, Schrempp, and Kiewit do not disclose a method of claim 1, further comprising: periodically checking the terminal node characteristics to adjust the selected algorithm and one or more control parameters.

In an analogous art, Matsunaga teaches a method of claim 1, further comprising: periodically checking the terminal node characteristics to adjust the selected algorithm and one or more control parameters (column 3, lines 46-59).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the bandwidth checking taught by Matsunaga to the method disclosed by Agnihotri, Dorai, Schrempp, and Kiewit. The motivation would have been to enable the headend to track the algorithm being used by each terminal.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri and Dorai as applied to claim 9 above, and further in view of Matsunaga.

Claim 12 is rejected on the same grounds as claim 4.

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Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai and Schrempp as applied to claim 17 above, and further in view of Mataunaga.

Claim 20 is rejected on the same grounds as claim 4.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp and Kiewit as applied to claim 1 above, and further in view of Bjorgan.

Referring to claim 5, Agnihotri, Dorai, Schrempp, and Kiewit do not disclose a method of claim 1, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.

In an analogous art, Bjorgan teaches a method of claim 1, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams (paragraph 56).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the MPEG stream data delivery taught by Bjorgan to the method disclosed by Agnihotri, Dorai, Schrempp and Kiewit. The motivation would have been to allow for spare space to be used in the MPEG stream, thereby conserving bandwidth.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri and Dorai as applied to claim 9 above, and further in view of Bjorgan.

Claim 13 is rejected on the same grounds as claim 5.

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Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai and Schrempp as applied to claim 17 above, and further in view of Bjorgan.

Claim 21 is rejected on the same grounds as claim 5.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, Schrempp, and Kiewit as applied to the claims above, and further in view of Ellis.

Referring to claim 7, Agnihotri, Dorai, Schrempp, and Kiewit do not disclose a method of claim 1, wherein the fingerprint is an audio fingerprint.

In an analogous art, Ellis teaches a method of claim 1, wherein the fingerprint is an audio fingerprint (column 10, lines 12-20).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the audio fingerprint taught by Ellis to the method disclosed by Agnihotri, Dorai, Schrempp, and Kiewit. The motivation would have been to enable the system to create a more accurate fingerprint.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri and Dorai as applied to claim 9 above, and further in view of Ellis.

Claim 15 is rejected on the same grounds as claim 7.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agnihotri, Dorai, and Schrempp as applied to claim 17 above, and further in view of Ellis.

Claim 23 is rejected on the same grounds as claim 7.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/  
Supervisory Patent Examiner, Art  
Unit 2424

JS